6. POINT ARGUELLO TO SAN FRANCISCO BAY, CALIFORNIA

(1) This chapter describes the waters of San Luis Obispo, Estero, Morro, Monterey, and Half Moon Bays; also, the port of Port San Luis, and the small-craft and commercial fishing harbors of Morro Bay, Monterey, Moss Landing, Santa Cruz, and Pillar Point. The coast, except for the bays, is rugged with many detached rocks close inshore and other dangers extending no more than 2 miles offshore. However, in 1975, shoaling to 10 fathoms was reported in 37°00.0'N., 122°30.1'W., about 12 miles SW of Pigeon Point. The area is well marked with navigational aids, and loran coverage is considered good.

(2) **COLREGS Demarcation Lines.–**The lines established for this part of the coast are described in **80.1130 through 80.1140,** chapter 2.

(3) **Sea Otter Refuge.–**The State of California Fish and Game Code prohibits the discharge of firearms or bows and the trapping of birds or mammals in the California Sea Otter Game Refuge. The refuge extends as a continuous band between the coastline and the three nautical mile limit for the state of California extending offshore from the mouth of the Santa Rosa Creek (35°34'N.) in the N. (See charts 18700 and 18680.) Additional information may be obtained by writing the Department of Fish and Game, Marine Region, 20 Lower Ragsdale Drive, Suite 100, Monterey, CA 93940, telephone 831-649-2870.

(4) **Weather, Point Arguello to San Francisco Bay**.–The weather along this coast is mostly cool, damp, and foggy in the summer, becoming mild and wet in winter. Summer afternoons on the coast are often clear and pleasant. The dominant weather feature is the semipermanent Pacific high. In summer, it is big and strong and covers the entire region. Storms and fronts are forced to move along the N side, so few affect this coast. In winter, the high weakens and retreats SE. This allows storms or frontal systems to pass through the area about every 7 to 10 days, on the average. Sometimes a series of these systems may result in a prolonged period of strong winds and heavy rains along the central and southern California coast. This situation is rare and occurs about every 2 to 3 years.

(5) The clockwise flow around the highs results in a NW flow along the coast in summer. These winds are enhanced by the formation of a thermal low over land, to the SE. The combination of these two features results in a sea breeze that can reach 20 knots during the afternoon and persist, at lower speeds, until midnight. Daytime temperatures often climb to near 70°F (21.1°C); nighttime lows drop to the low fifties (10.6° to 11.7°C) in summer. Occasionally a hot flow from the land will push temperatures into the nineties (32.8° to 37.2°C). This is as likely in early fall as it is in summer. The winds blowing across the cool **California Current** produce low clouds and sea fog. These conditions are prevalent close to the coast in the early morning hours. They improve during the day, particularly close to and on the shore. August and September are the worst months; fog reduces visibilities to below 0.5 mile (0.9 km) on more than 15 days per month at some locations.

(6) Winds are more variable, but often NW, in winter, becoming WNW in midwinter. Weak E winds often occur when a warm-type high centers itself over the **Great Basin** to the NE. (The Great Basin is the desert plateau comprising most of Nevada, western Utah and portions of northern Arizona.) This warm high pressure system produces clear skies and ideal conditions for land fog, which may drift out over coastal waters. This fog, while often dense, is shallow and usually burns off during the morning hours. Occasionally following a passage of a cold front, a cold-type high will move into the Great Basin. This can result in a foehn wind, over central and southern California, known as a **Santa Ana**. This NE wind flows down the canyons and into certain coastal basins. Its effect varies from place to place, but speeds may reach 50 knots. In some areas, an intensified sea breeze counterflow is observed. The most severe conditions are normally observed in late fall, but may occur from fall through spring, which is also considered the rainy season. From about November through April, precipitation occurs on about 6 to 12 days per month. Average maximum temperatures in winter range from the middle fifties (11.7° to 13.9°C) around San Francisco, to the low sixties (16.1° to 17.2°C) at Point Arguello, while nighttime lows drop to the low to middle forties (5.0° to 8.3°C). Occasionally a cold outbreak will send temperatures below freezing (<0°C).

(7) **Charts 18700, 18721.–**From Point Arguello to Point Sal, the coast trends N for 19.5 miles in two shallow bights separated by Purisima Point. From Point Sal the coast continues N for 14 miles, then bends sharply W for 6 miles to Point San Luis, forming San Luis Obispo Bay. Soundings are useful along this stretch of the coast, and between Point Arguello and Point San Luis the 20-fathom curve can be followed with safety in thick weather. In clear weather, the headlands and other natural features can be easily recognized.

(8) **Danger and restricted areas** extend 3.5 miles offshore from S of Point Arguello to Point Sal. (See **334.1130**, chapter 2, for limits and regulations.)

(9) **Point Pedernales,** 1.5 miles N of Point Arguello, and the largest of the numerous rocks as far as 300 yards offshore, are very dark and conspicuous alongside the sand dunes immediately N of the point.

(10) **La Honda Canyon,** 2 miles N of Point Arguello, is a deep gulch crossed by a railroad trestle easily distinguished when abreast the mouth. From here the coast to Purisima Point consists of a low tableland and sand dunes that contrast strongly with the dark cliffs S.

(11) **Surf,** 7 miles N of Point Arguello, is a station along the railroad. The yellow station house and a black tank are conspicuous. A white elevated water tank, 1.3 miles NE of the station house, and several launching gantries at the Vandenberg Air Force Base are conspicuous along this section of the coast.

(12) **Chart 18700.–Purisima Point,** 10.6 miles N of Point Arguello, is low and rocky, with reefs extending SE for 0.3 mile. The N side of the point is bare sand. It has been reported that an inshore set is experienced off the coast in the vicinity of the point. From Purisima Point to Point Sal, the coast is sandy and lower than that S.

(13) **Point Sal,** 19.5 miles N of Point Arguello, is a bold dark headland marked by stretches of yellow sandstone. From the NW the headland looks like a low conical hill with two higher conical hills immediately behind it. It rises gradually to a ridge, 1,640 feet high, 3 miles to the E. From the S the hills are not so well defined. **Lion Rock,** 54 feet high, is a rocky islet 200 yards off the S face of Point Sal. A small rock is close to the point. Breakers and

reefs extend nearly 600 yards S and W from Point Sal and 200 yards SW of Lion Rock.

(14) Anchorage under Point Sal affords some protection from NW winds in 7 to 9 fathoms, sandy bottom, but is subject to swells. Shoal water extends nearly 0.5 mile W from the SE point of the anchorage. The best anchorage is in 7 fathoms 500 yards 123° from Lion Rock and with the northern end of the rock just open of the extremity of Point Sal.

(15) From Point Sal north the coast is a sand beach backed by low dunes for 14 miles and then changes to bold rocky cliffs that curve sharply W to Point San Luis and form the N shore of San Luis Obispo Bay.

(16) **Oceano** is a small resort 12 miles N of Point Sal. The county airport is here.

(17) **Pismo Beach** is a resort 14 miles N of Point Sal. The pleasure pier is 1,200 feet long and has 12 feet at the outer end. In 1983, the pier was partially destroyed by storms, and submerged pilings are reported to exist at the outer end. Caution is advised in the area near the pier. **Shell Beach** is a small residential settlement, 1.5 miles NW of Pismo Beach. An aerolight, 6 miles N of Pismo Beach, is visible from seaward.

(18) **Charts 18703, 18704.–San Luis Obispo Bay,** 35 miles N of Point Arguello, is a broad bight that affords good shelter in N or W weather. S gales occur several times during the winter. The E shore is a narrow tableland that ends in cliffs 40 to 100 feet high to within 0.5 mile of **San Luis Obispo Creek** where a sand beach fronts **Avila Beach.** W of the creek the shore is high with rocky bluffs extending to **Point San Luis.**

(19) **Port San Luis,** on the W shore of the bay, is the seaport for San Luis Obispo which is 10 miles inland. The port is primarily a base for commercial fishing boats, sport-fishing boats, and recreational craft.

(20) **Prominent features**.–Point San Luis, a bold prominent headland, and the pier in about 35°10'13"N., 120°44'27"W. are reported to be useful radar targets.

(21) **San Luis Obispo Light** (35°09.6'N., 120°45.6'W.), 116 feet above the water, is shown from a cylindrical structure on Point San Luis; a fog signal is at the light. **San Luis Hill,** 0.5 mile NW of the light, is prominent from the S.

(22) **COLREGS Demarcation Lines.**–The lines established for San Luis Obispo Bay are described in **80.1130**, chapter 2.

(23) **Anchorage.**–The general anchorage is inside a line extending SW from Fossil Point to the outer end of a breakwater which extends SE from Whaler Island. Mariners should contact the harbormaster's office for anchorage information.

(24) **Special anchorages** are E of Avila Pier 1 (County Wharf) and in the W end of the harbor. (See **110.1 and 110.120**, chapter 2, for limits and regulations.) All anchorages are exposed to weather from the S and SE which cause heavy swells.

(25) The dangers off the entrance to San Luis Obispo Bay are buoyed; the E part of the bay has many rocks and heavy growths of kelp. **Souza Rock,** 2.1 miles SE of San Luis Obispo Light, is covered 16 feet and rises abruptly from 19 fathoms. **Westdahl Rock,** 1.3 miles SW of the light, is covered 18 feet and rises abruptly from 10 fathoms. **Howell Rock,** 1.6 miles E of the light, is covered 13 feet. **Lansing Rock** covered 18 feet and **Atlas Rock** covered 13 feet are 0.7 and 0.5 mile E of the light, respectively.

(26) A 2,400-foot breakwater, extending SE from Point San Luis through **Whalers Island** to a ledge partly bare at low water, provides some protection to vessels at anchor or at the wharves. **Smith Island,** 44 feet high and about 90 yards wide, is 0.2 mile N of Whalers Island.

(27) **Routes.**–San Luis Obispo Bay may be entered from S by passing 100 yards W of the lighted gong buoy marking Souza Rock, thence a **000°** course for about 2 miles until past Lansing Rock, and thence to anchorage or to the wharves. From N stay outside the lighted bell buoy marking Westdahl Rock and the lighted whistle buoy off Point San Luis breakwater, then head into the bay as previously mentioned.

(28) **Tides.**–The mean range of tide at Avila Beach is 3.6 feet, and the diurnal range of tide is 5.4 feet. A range of about 9 feet may occur on days of maximum tides. The lowest low water is about 2.5 feet below mean lower low water.

(29) Port San Luis is a **customs port of entry.**

(30) **Quarantine, customs, immigration, and agricultural quarantine.**–(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.) Vessels subject to inspection are requested to contact the harbormaster's office.

(31) **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(32) **Harbor regulations.**–The port of Port San Luis is administered by the Port San Luis Harbor District and under the control of a harbormaster. The office is at the foot of Harford Pier 3. The harbormaster monitors VHF-FM channel 16 and can be contacted by phone at 805-595-5435. Transients should report to the harbormaster for guest mooring assignments.

(33) **Wharves.**–Harford Pier 3, 0.5 mile N of Point San Luis, is used by commercial and sport fisherman. The berthing space at the end has 17 to 20 feet alongside. In 1990, shoaling to an unknown extent was reported along the pier. The pier is lighted at night. A fuel dock is at the bulkhead just N of the pier. The pier is operated by the Port San Luis Harbor District.

(34) The former Unocal Corp. Pier, 1 mile NE of Point San Luis, has 31 feet along both sides. The entire length of the pier is lighted at night. It is not safe to moor alongside in strong S to SE weather; vessels usually leave the pier on the approach of a storm and anchor until it moderates.

(35) Avila Pier 1 (County Wharf), 1.4 miles NE of Point San Luis, was damaged by a winter storm in 1983. Submerged obstructions are reported to be in the area near the pier. A submarine sewer line is about 40 feet E and parallel to the pier.

(36) **Supplies and repairs**.–Gasoline, diesel fuel, water, marine supplies, a launching ramp, and a 50-ton mobile hoist are available. Some repairs can be made.

(37) **Communications.**–Transportation is by automobile to San Luis Obispo where rail, bus, and air connections can be made.

(38) **Charts 18703, 18700.**–From Point San Luis to Point Buchon, the coast trends NW for 9 miles and consists of cliffs 40 to 60 feet high. The land rises rapidly from the cliffs to Mount Buchon. There are numerous outlying rocks and submerged ledges that extend more than a mile from the shore in some places.

(39) Point San Luis and Point Buchon, both bold prominent headlands, are reported to be useful radar targets when navigating this section of the coast.

(40) **Mount Buchon,** a rugged mountain mass between San Luis Obispo Bay, Estero Bay, and the valley of San Luis Obispo,

is prominent from either N or S. **Saddle Peak,** 4.1 miles NNW of San Luis Obispo Light, is visible for over 40 miles.

(41) **Santa Rosa Reef,** 1.4 miles WSW from San Luis Obispo Light, is covered 2¾ fathoms and rises abruptly from 13 fathoms. **Lone Black Rock,** 2 feet high and of small extent, is 0.5 mile W from the light and 0.2 mile offshore.

(42) **Pecho Rock,** 40 feet high, is 3 miles WNW from the light and 0.5 mile offshore. A smaller rock, 2 feet high, is 0.3 mile E from it. Foul ground, marked by kelp, is between the rocks and the shore.

(43) In August 1984, a fish haven, covered about 41 feet, was under construction about 1 mile NW of Pecho Rock.

(44) **Diablo Canyon,** 5.8 miles NW of Point San Luis Light, is the site of a large nuclear powerplant. The two concrete dome-shaped structures and other large buildings are conspicuous from well offshore.

(45) A sharp prominent dark gray rock, 111 feet high, is 0.1 mile offshore from the powerplant.

(46) **Lion Rock,** 0.9 mile NW from the powerplant and 0.2 mile offshore, is 240 yards long in a NW direction and 136 feet high. A high rock lies between it and the shore, and a small low rock is 200 yards W.

(47) **Point Buchon** ends in an overhanging cliff 40 feet high, with a low tableland behind that rises rapidly to a bare hill a mile to the E. There are a few detached rocks close under the cliffs. A lighted whistle buoy is 1 mile SW of the point and about 400 yards WSW of a rock covered 3¾ fathoms.

(48) **Estero Bay** is formed by a curve in the coast between Point Buchon and **Point Estero,** 13.5 miles NNW. The shore of the bay follows a general N direction from Point Buchon for 11 miles, then turns sharply W for 5 miles to Point Estero. The N part of Estero Bay is fringed with covered rocks and scattered kelp. The seaward faces of Cayucos Point and Point Estero are cliffs 50 to 90 feet high.

(49) The coast drops abruptly from bold Mount Buchon to a sandy spit bordering Morro Bay and then rises to a bluff-bordered treeless country of rolling hills.

(50) Point Estero, Morro Rock, and Cayucos Point are reported to be useful radar targets in the vicinity of Estero and Morro Bays.

(51) **Morro Bay,** 6 miles N of Point Buchon, is a shallow lagoon separated from Estero Bay by a narrow strip of sand beach. The port facilities at the city of **Morro Bay,** a mile inside the entrance, are used by commercial fishing, sport-fishing, and recreational craft.

(52) **Morro Rock,** the tall cone-shaped mound on the N side of the entrance to Morro Bay, is the dominant landmark in this area. A breakwater, extending 600 yards S from the rock, is marked at its outer end by **Morro Bay West Breakwater Light** (35°21'46"N., 120°52'11"W.), 36 feet above the water and shown from a white column. A fog signal is at the light. Sections of the S end of the breakwater are reported to be frequently awash under heavy seas and high tides, but have never been observed completely submerged.

(53) The three 450-foot powerplant stacks 0.5 mile E of Morro Rock are visible from far offshore. The standpipe about 500 yards E of the stacks is prominent from close in. **Hollister Peak,** 4.2 miles ESE of Morro Rock, is the most prominent of a row of peaks behind Morro Bay because of its jagged outline.

(54) **COLREGS Demarcation Lines.**–The lines established for Estero-Morro Bay are described in **80.1132,** chapter 2.

(55) **Channels.**–The entrance to Morro Bay is through a buoyed channel between the protective breakwaters. Due to continual shifting of the channel, the buoys are not charted as they are frequently shifted to mark the best water.

(56) Mariners are advised to use extreme caution when entering the bay and to contact the harbormaster or Coast Guard Group Long Beach on VHF-FM channel 16 for current entrance and channel conditions.

(57) From Fairbank Point, on the E side of the bay, a privately maintained channel leads S to the Morro Bay State Park Basin at **White Point**; the depth for 0.3 mile is about 7½ feet. The basin has depths of about 8 feet. Vessels heading for the basin should approach White Point close inshore as the channel narrows at this point. In July 1993, shoaling to 1 foot was at the entrance to the basin. Swells from North Pacific winter storms sometimes break across the entire entrance.

(58) **Special anchorages** are in Morro Bay, 1 and 2 miles above the entrance. (See **110.1 and 110.125**, chapter 2, for limits and regulations.)

(59) **Tides.**–The mean range of tide at Morro Beach is 3.5 feet, and the diurnal range of tide is 5.2 feet.

(60) Extremely high waves created by the sandbars in the entrance to Morro Bay make dangerous navigation conditions.

(61) **Currents** in the entrance channel and around the breakwaters are strong at times. It is advisable to approach the entrance from the SW because of the currents and sea conditions. Sharp turns should be avoided in the vicinity of the breakwaters, especially in heavy weather. It is reported that currents in the N part of the bay, especially flood currents, have a tendency to set vessels toward the city north T-pier.

(62) **Weather, Estero Bay.**–Estero Bay is one of the foggiest areas along the Pacific Coast. The fog is most common in the mornings and evenings. (See Weather, West Coast and Hawaii, indexed as such, chapter 3, for further information.)

(63) **Coast Guard.**–A Coast Guard station is at the foot of the city north T-pier. The station maintains motor lifeboats and monitors VHF-FM channel 16.

(64) **Harbor regulations**.–Morro Bay Harbor is owned by the city of Morro Bay and is under the control of a **harbormaster**, who maintains an office at the foot of the city north T-pier. The harbormaster monitors VHF-FM channels 16 and 12 and can be reached by telephone at 805-772-6254. Harbor patrol boats operate from the city north T-pier and monitor VHF-FM channel 16. The boats are manned during daylight, and a patrolman is on call at all other times.

(65) Yachts and small craft may tie up to the yacht club dock; otherwise they must either anchor in the bay or check with the harbormaster for other accommodations

(66) **Wharves.**–The city north T-pier, at the city of Morro Bay, is on the N side of the harbor about 0.8 mile above the entrance; depths alongside are about 22 feet. The pier is owned and operated by the city of Morro Bay.

(67) The city south T-pier, SE of the city north T-pier, is owned and operated by the city. It has about 20 feet alongside.

(68) **Supplies and repairs**.–Gasoline, diesel fuel, water, ice, a launching ramp, and marine supplies are available in the port.

(69) A boat works has a crane that can handle craft up to 20 tons and 50 feet long; hull, engine, and rigging repairs can be made.

(70) For 3 miles N of Morro Rock, submerged pipelines extend to oil loading terminals up to 0.8 mile offshore in Estero Bay; the

outer limits are marked by buoys. Loading ships lie head-to in the direction of the prevailing NW wind. Adequate lines for offshore breast moorings are absolutely essential to prevent damage to the vessel and terminal equipment in case of a S or strong offshore (Santa Ana type) wind. Mariners are advised that weather conditions within the mooring areas can change rapidly. A mooring master supervises the mooring of vessels.

(71) A rock covered 5¼ fathoms, 1.3 miles NW of Morro Rock, is marked by a gong buoy. An unmarked fish haven, covered 6¾ fathoms, is about 1.4 miles NNW of Morro Rock in about 35°23'36"N., 120°52'32"W.

(72) **Cayucos,** 4.5 miles N of Morro Rock and in the NE part of Estero Bay, has a fishing and pleasure pier; a depth of 12 feet is at the outer end.

(73) Anchorage with fair shelter from the N and NW may be had in 11 fathoms, sandy bottom, with the prominent white concrete tank on a hill W of Cayucos bearing 017°.

(74) **Mouse Rock,** 0.7 mile W of Cayucos, is covered ½ fathom and breaks heavily in all but smooth weather; it is marked by a bell buoy.

(75) **Cayucos Point,** 2 miles W of Cayucos, is a low rocky promontory. **Constantine Rock,** 0.5 mile S of the point, is covered 1 fathom and breaks heavily in a moderate swell; it is marked on the S side by a buoy.

(76) **Chart 18700**.–From Point Estero N for 8 miles to the village of Cambria, the bluffs increase in height and the range of grassy hills is close to shore. The shore is well fringed with kelp; several rocks are close inshore. **White Rock,** 6 miles NW of Point Estero, is the most prominent. A pinnacle rock, 0.7 mile SW of White Rock, is covered 5½ fathoms.

(77) **Von Helm Rock,** 7.2 miles NW of Point Estero and nearly a mile offshore, is covered 2½ fathoms. The rock is very sharp and breaks only in the roughest weather.

(78) **Cambria** is about 1 mile inland in a grove of pine trees. Some of the streets and buildings are visible from seaward. No landing or anchorage is recommended.

(79) From Cambria for 6.5 miles to San Simeon, rocks continue close inshore, but the bluffs decrease in height and the hills recede from the shoreline. Thick groves of pine trees scatter the hillsides. Of the several rocks offshore, **Cambria Rock,** 10 feet high, and **Pico Rock,** 12 feet high, are the largest, but they are not prominent from seaward. Shoal patches up to 360 yards surround Cambria Rock, and there is foul ground NW and S of Pico Rock. A shoal, 580 yards SW of Pico Rock, is covered 3¾ fathoms.

(80) **San Simeon Bay,** 14 miles NW of Point Estero, is formed by the shoreline curving sharply to the W, and on the W side by **San Simeon Point,** a low wooded projection extending SE. The trees show well from W, but from S the warehouses and buildings in San Simeon are more prominent. From W the point itself is not easily recognized by those not familiar with it.

(81) A lighted bell buoy, 0.4 mile SE of the point, marks the entrance to San Simeon Bay. The bay offers good shelter in N weather, but is exposed to S gales in winter. The best anchorage is in the middle of the bight in 5 to 8 fathoms, hard sand bottom. A small ravine due W of the anchorage can be used to go ashore.

(82) **San Simeon,** 1.7 miles ESE of San Simeon Point, is a small town with a 995-foot sport fishing pier. A number of motels are in the town to handle the many tourists that visit Hearst Castle.

(83) Prominent **Hearst Castle,** 2.7 miles NE of San Simeon, is the former palace of the late William Randolph Hearst; it is now a State Historical Monument. The structure is lighted at night.

(84) The coast from San Simeon Point for 5 miles NW to Point Piedras Blancas, is low, with numerous detached rocks lying in some cases over 0.5 mile offshore and usually well marked by kelp.

(85) **Point Piedras Blancas** is a low rocky point projecting about 0.5 mile from the general trend of the coast. **Piedras Blancas Light** (35°39'56"N., 121°17'04"W.), 142 feet above the water, is shown from a white conical tower with a flat top at the point.

(86) **Piedras Blancas** are two large white rocks, 74 and 31 feet high, 500 yards offshore and about 0.8 mile E of the point. From the S they look like one rock.

(87) **Outer Islet,** a large and prominent white rock 110 feet high, is 0.25 mile W of the point. In hazy weather this rock is sometimes visible from the NW and W when the light cannot be seen.

(88) Anchorage for a small vessel, with protection from NW winds, may be had under Point Piedras Blancas in 4 to 5 fathoms, sandy bottom, with the light about 0.2 mile bearing 280°.

(89) A bank covered 11 fathoms, 3 miles WNW from Piedras Blancas Light, has been reported breaking in a heavy W swell.

(90) From Point Piedras Blancas for 6 miles NNW to the mouth of the San Carpoforo Valley, the coast is low, with small bluffs and rolling treeless hills. Numerous rocks, fringed with kelp, extend well offshore. **Harlech Castle Rock,** 0.7 mile offshore and 1.5 miles NW of Piedras Blancas Light, is the outermost rock and uncovers 1 foot; it is not usually marked by kelp. A shoal covered 2¾ fathoms, 0.5 mile NW of this rock, is surrounded by 10 to 12 fathoms.

(91) **La Cruz Rock,** 48 feet high and fairly prominent, is 3 miles NNW of Piedras Blancas Light and just S of Point Sierra Nevada. A sandy beach inshore from the rock is a fair landing place in heavy NW weather. This stretch of beach is relatively free from breakers in NW weather. There is a suitable anchorage for small boats E of the N limits of the rock in heavy NW or light S weather.

(92) **Point Sierra Nevada,** a low inconspicuous bluff, is named for the steamship SIERRA NEVADA, which stranded on the rock 400 yards NW of the point.

(93) About 1.8 miles N of Point Sierra Nevada is a group of isolated buildings inland from **Breaker Point;** the point is not prominent nor easily identified.

(94) **Ragged Point,** 6 miles N of Point Piedras Blancas, is a low projection readily identified, being the first point S of prominent San Carpoforo Valley; visible rocks and ledges extend about 0.3 mile W of the point.

(95) From Ragged Point NW for 41 miles to the Big Sur River, the coast is very bold and rugged. The cliffs are 200 to 500 feet high, and the land rises rapidly to elevations of 2,500 to 5,000 feet within 2 to 3 miles from the coast. There are few beaches and few outlying rocks. The highway along the coast is plainly visible from seaward.

(96) Two conspicuous landmarks lie between Ragged Point and Cape San Martin. **White Rock No. 1,** 39 feet high and rather sharp, is 0.5 mile offshore and 3.8 miles NW of Ragged Point, about 200 yards W of White Rock No. 1 is a rock awash. **White Rock No. 2,** 64 feet high and with a rounded top, is 0.2 mile offshore and 5.8 miles NW of Ragged Point.

(97) **Salmon Cone,** 500 feet high, is a rocky butte close to the shore and 0.5 mile NE of White Rock No. 1. The cone is not conspicuous as it blends into the background.

(98) Several deep narrow gulches indent the coast between Salmon Cone and Cape San Martin. Two of the most prominent are **Villa Creek** and **Alder Creek.** Villa Creek is crossed by a conspicuous white bridge.

(99) A pinnacle rock, covered 1¾ fathoms, is 1.7 miles SE of Cape San Martin and 0.5 mile offshore.

(100) **Whaleboat Rock,** which uncovers 5 feet, and **Bird Rock,** 5 feet high, are about a mile SE of Cape San Martin; they are conspicuous only when close inshore. A group of buildings is on the bluff just N of these rocks.

(101) **Cape San Martin,** 16 miles NW of Point Piedras Blancas, has a ragged precipitous seaward face and is readily identified by the **San Martin Rocks.** From S, the inner rock, which is 100 yards offshore, is the most prominent, being 144 feet high and white in appearance. The middle rock is 34 feet high and triangular. The outer and northernmost rock is cone-shaped, 44 feet high, and 0.5 mile offshore.

(102) **Willow Creek** bridge, about 0.3 mile N of Cape San Martin, is prominent from W.

(103) From Cape San Martin for 9.5 miles to Lopez Point, the coast forms an open bight with rugged shores intersected occasionally by deep narrow valleys. There are a few detached rocks, but only two extend far from the shoreline.

(104) **Plaskett Rock** is a large prominent white rock, 110 feet high, 2 miles N of Cape San Martin and 0.3 mile offshore.

(105) **Tide Rock,** 4 miles N of Cape San Martin and 0.7 mile offshore, is awash and quite sharp; it is a menace in smooth weather as there is no breaker to indicate its position.

(106) **Lopez Point,** 9.5 miles NW of Cape San Martin, is a narrow tableland, 100 feet high, projecting a short distance from the highland. **Lopez Rock,** 51 feet high with a prominent cleft in the middle, is 0.3 mile offshore and 0.8 mile NW of Lopez Point. A shoal covered 6 fathoms is 0.3 mile SW of Lopez Rock.

(107) An open anchorage affording some protection from NW weather may be had about 1 mile SE of Lopez Point in 10 fathoms, sandy bottom. Smaller vessels may obtain better shelter by anchoring inside the kelp bed in about 5 fathoms, sandy bottom, with Lopez Point bearing about 287°. A rock covered 1¾ fathoms is in the kelp beds 0.5 mile SE of Lopez Point.

(108) **Harlan Rock,** 10 feet high, is 0.3 mile offshore and 1.7 miles ESE of Lopez Point. The rock is conspicuous only when approaching the anchorage. A shoal covered ¾ fathom is 680 yards SE of Harlan Rock.

(109) Several peaks are prominent behind Lopez Point. **Junipero Serra Peak,** 10 miles NE of Lopez Point, has pines on and near the summit. **Twin Peak** and **Cone Peak,** 4 miles NE of Lopez Point, are known as the twin peaks; they have scattered trees on their summits and are good landmarks even at night. An observation tower on the summit of Cone Peak is lighted when occupied.

(110) From Lopez Point for 17.5 miles to Pfeiffer Point, the coast is rugged, and high mountains rise precipitously from the shore. The coastline makes in slightly, forming a shallow bight. Several hundred feet above the beach, the slopes are marked by numerous highway cuts, and the highway bridges over these are conspicuous from offshore.

(111) **Square Black Rock,** 4 miles NNW of Lopez Point, is 62 feet high.

(112) **Dolan Cone,** 4.5 miles NNW of Lopez Point, is white in appearance and 77 feet above the water.

(113) **Little Slate Rock,** 7.5 miles NNW of Lopez Point, is 4 feet high; **Slate Rock** is 18 feet high. Both rocks are discernible only when close inshore.

(114) Two major landslides are prominent in the vicinity of **Partington Point,** about 6.5 miles ESE of Pfeiffer Point.

(115) A prominent dwelling, visible from the W and N, is on a bluff 5.5 miles ESE of Pfeiffer Point. Several conspicuous highway bridges cross the canyons. The highway leaves the coast about 3.5 miles ESE of Pfeiffer Point and does not appear again until N of Point Sur.

(116) A deep submarine valley makes in from the S in the bight 13.5 miles NW of Lopez Point and 4.5 miles SE of Pfeiffer Point. The head of the canyon parallels the shore for about a mile and the 100-fathom curve lies only 500 yards from the shore.

(117) **Chart 18686.–Pfeiffer Point,** 17.5 miles NW of Lopez Point and 6 miles SE of Point Sur, is 400 to 500 feet high; it is the seaward end of a long ridge 2,000 feet high, 1.5 miles NE of the point. The point presents a bold, precipitous, light-colored face to seaward. It is distinguished from the S by its color, and from N the pointed summit stands out. The point is more prominent from N than from S. **Sycamore Canyon** is immediately NW of the point.

(118) Anchorage, affording fair protection in N and NW weather, may be had for small vessels about 0.9 mile ESE of Pfeiffer Point and 500 yards offshore in 8 fathoms, sandy bottom, with chain sufficient to clear the kelp line. This anchorage is used extensively by local fishermen. Access by land is difficult as the road is poor.

(119) **Cooper Point,** 1.5 miles NW of Pfeiffer Point, is marked by a prominent pinnacle 172 feet high and an off-lying rock 18 feet high.

(120) From the mouth of **Big Sur River,** 3.5 miles NW of Pfeiffer Point, to Point Sur, the shore is low, with sand beaches and dunes extending E. Submerged rocks and ledges extend 1 mile or more offshore in some places between Cooper Point and Point Sur.

(121) **False Sur,** 1.2 miles SE of Point Sur Light, is a 209-foot rounded hillock of somewhat similar appearance to Point Sur, and during fog and low visibility may be mistaken for it.

(122) **Point Sur,** 121 miles NW of Point Arguello and 96 miles SSE of San Francisco Bay entrance, is a black rocky butte 361 feet high with low sand dunes extending E from it for over 0.5 mile. From N or S, it looks like an island and in clear weather is visible about 25 miles. The buildings on the summit of Point Sur may confuse the stranger. **Point Sur Light** (36°18.4'N., 121°54.1'W.), 250 feet above the water, is shown from a white tower on a gray stone building on the seaward face of the point. The buildings of a U.S. Naval Facility for oceanographic research are about 0.5 mile E from the light.

(123) **Pico Blanco,** 4.5 miles E of Point Sur, rises from the long ridge bordering the S side of Little Sur River. The pointed and white-topped peak is prominent in clear weather.

(124) **Sur Rock,** 1.8 miles SSE from Point Sur Light and nearly 0.8 mile offshore, is awash. A shoal covered 2 fathoms, 0.3 mile W of Point Sur, breaks heavily in all but very smooth weather. About 0.5 mile SW from Sur Rock is a shoal covered 4½ fathoms that breaks in heavy weather. Extending 0.9 mile from Sur Rock toward Point Sur are many covered rocks that show breakers in

moderately smooth weather. Foul ground lies between the rocks and the beach. These dangers are usually well marked by kelp, but it is a dangerous locality in thick or foggy weather, and vessels should stay in depths greater than 30 fathoms.

(125) **Chart 18680.**–The coast trends NNW from Point Sur for 17 miles to Cypress Point, then NE for 4 miles to Point Pinos.

(126) Monterey Bay is a broad open bight 20 miles wide between Point Pinos and Point Santa Cruz. The shores decrease in height and boldness as Point Pinos is approached, while those of Monterey Bay are, as a rule, low and sandy. The valleys of Salinas and Pajaro Rivers, which empty into the E part of Monterey Bay, are marked depressions in the coastal mountain range and are prominent as such from a considerable distance seaward. From Point Santa Cruz the coast curves W and N for 23 miles to Pigeon Point, and then extends for 25 miles in a general NNW direction to Point San Pedro, the S headland of the Gulf of the Farallones.

(127) Between Cypress Point and Point Pinos the coast is bold and the 30-fathom curve is less than 1 mile from shore in many places; deep submarine valleys extend into Carmel Bay and Monterey Bay. N of Monterey Bay, depths are more regular and the few dangers extend less than 1 mile from shore.

(128) **Monterey Bay National Marine Sanctuary** was established to protect and manage the conservation, ecological, recreational, research, educational, historical and esthetic resources and qualities of the coastal and ocean waters and submerged lands in and surrounding Monterey Bay. (See **15 CFR 922,** chapter 2, for limits and regulations.)

(129) **Routes** or **recommended tracks** for vessels **300 gross tons and higher** transiting the vicinity of Monterey Bay National Marine Sanctuary are from a position (**36°18.31'N., 122°12.79'W.**) 15 miles off Point Sur, to a position (**37°10.86'N., 122°39.74'W.**) 12.7 miles off Pigeon Point, for N bound vessels; and from a position (**37°10.85'N., 122°43.87'W.**) 16 miles off Pigeon Point, to a position (**36°18.29'N., 122°18.98'W.**) 20 miles off Point Sur, for **S bound vessels**.

(130) Vessels carrying **hazardous bulk cargo** recommended tracks are further offshore, beginning at a position (**36°18.27'N., 122°25.16'W.**) 25 miles off Point Sur, to a position (**37°10.81'N., 122°55.14'W.**) 25 miles off Pigeon Point, for N bound vessels; and from a position (**37°10.78'N., 123°01.39'W.**) 30 miles off Pigeon Point, to a position (**36°18.24'N., 122°31.35'W.**) 30 miles off Point Sur, for S bound vessels.

(131) **Tank vessels** are recommended to transit the Monterey Bay National Marine Sanctuary area well offshore (at least 50 miles). Tank vessels and vessels **carrying hazardous cargo** transiting San Francisco Golden Gate are recommended to use the Main (W) Traffic Lanes when proceeding to and from S of San Francisco Traffic Separation Scheme.

(132) **Chart 18686.**–Just N of Point Sur (36°18.4'N., 121°54.0'W.), a sandy beach and bluff continue for 1.8 miles to **Little Sur River,** where the coast becomes bold, the 30-fathom curve lying in many cases less than 1 mile from shore. The highway returns to the coast just N of Point Sur and is visible from seaward until it reaches Pinnacle Point. It is marked by several bridges.

(133) **Ventura Rocks,** 2.2 miles N of Point Sur, are two rocks close together about 0.6 mile offshore. The N rock is conical-shaped and 12 feet high. It is fairly conspicuous when seen from the N with the sand bluff N of Point Sur as a background, but when seen from the S it is confused with the rocks near the beach and to the N. The S rock uncovers.

(134) From the conspicuous valley of the Little Sur River for more than 7 miles to Soberanes Point, the coast, although moderately straight, is bold, rugged, and broken, with numerous detached rocks and covered ledges close inshore.

(135) **Bixby Landing,** 4 miles N of Point Sur, is identified by a prominent concrete arch bridge across Bixby Creek; the bridge shows well to the W, but is obscured to the N. Less prominent is another concrete arch bridge across Rocky Creek, which is just N of Bixby Creek.

(136) **Soberanes Point** projects slightly from the general trend of the coast. An isolated 200-foot grassy hillock lies immediately back of the point, and a grassy ridge extends inland to heights of 1,600 feet.

(137) The 4.6-mile coastline from Soberanes Point to Pinnacle Point is rugged and broken, but becomes less precipitous and the mountain ridges lessen in height as Pinnacle Point is approached. Innumerable rocks and ledges extend in some cases over 0.3 mile offshore.

(138) **Lobos Rocks,** a group of small rocky islets, are nearly 0.5 mile W of Soberanes Point. The two larger islets are white-topped, and each is about 40 feet high. From seaward they rise abruptly from 20 fathoms, but there is foul ground between them.

(139) **Mount Carmel** (chart 18680), 7.3 miles NE of Point Sur, is round and bare on the summit. This peak and **Pico Blanco,** 4.5 miles E of Point Sur, sometimes can be seen when the lower land is covered by fog or haze.

(140) **Yankee Point,** 2.5 miles N of Soberanes Point, projects 0.3 mile from the general trend of the coast. The seaward face is irregular and broken, with numerous detached rocks. **Yankee Point Rock,** 6 feet high, is 125 yards W of the point. A covered rock that generally breaks is 0.4 mile S of the point and the same distance offshore.

(141) **Pinnacle (Carmel) Point,** the outer tip of **Point Lobos** and the S point at the entrance to Carmel Bay, is an irregular, jagged, rocky point 100 feet high. **Whalers Knoll,** the 200-foot-high hill 0.5 mile ESE of Pinnacle Point, is one of the prominent knobs on Point Lobos. **Sea Lion Rocks** are a group of rocks off the point. A rock, formerly known as Whalers Rock, is the farthest offshore of the group and is 0.5 mile SW of the point. It is 12 feet high, the most conspicuous of the group, and more prominent from the N than from the S.

(142) The entire Point Lobos area is included in a State ecological reserve. Regulations prohibit landing anywhere within its boundaries. **Whalers Cove,** the bight on the N shore 0.8 mile ESE of Pinacle Point, may be used as a harbor of refuge only. Kelp growth is quite heavy in the cove.

(143) **Carmel Bay** is a 2.8-mile-wide open bight between Pinnacle Point and Cypress Point. The beach in front of the city of Carmel is low, but the land on the S side of the bay is bare and mountainous, and the N side is hilly and heavily wooded.

(144) Carmel Bay affords shelter in N and S weather to small craft having local knowledge. In N weather anchorage may be had in two coves on the N shore, **Pebble Beach** on the W and **Stillwater Cove** on the E. These are shallow kelp-filled bights, with rock and gravel bottom. Anchorage is in 1 to 3 fathoms, but local knowledge is necessary to avoid the dangers. In S weather, anchorage may be had in Whalers Cove in 3 to 4 fathoms, rock or

gravel bottom, but there is a rock covered 1¾ fathoms near the middle of the cove.

(145) **Carmel Canyon,** a deep submarine valley, heads in the SE part of Carmel Bay and has depths of 50 fathoms less than 0.2 mile from the beach. The bay is not recommended for strangers.

(146) On the NE shore of Carmel Bay, and N of **Carmel River,** is the city of **Carmel.** The lights of Carmel are prominent on a clear night. The tower of Carmelite Monastery, 1.5 mile E of Pinnacle Point, is a conspicuous structure.

(147) **Cypress Point,** on the N side of the entrance to Carmel Bay, is comparatively low and extends about 2 miles beyond the general trend of the coast. The cliffs are steep, and numerous detached rocks are close under them. The point is heavily wooded to within 400 yards of its tip. **Cypress Point Rock,** 12 feet high, is 450 yards NW of Cypress Point and is prominent from either N or S. A lighted gong buoy is NW of the point.

(148) **Chart 18685.**–From Cypress Point to Point Pinos, the coast trends NE for 4 miles. Numerous small rocks and ledges closely border the shoreline. The land is low, with the height of the cliff decreasing toward **Point Joe,** a rocky extension of the shoreline where the surf breaks heavily. From this point to Point Pinos, white sand dunes are conspicuous against the dark trees behind them, even in moonlight.

(149) **Point Pinos,** on the S side of Monterey Bay, is low, rocky, and rounding with visible rocks extending offshore for less than 0.3 mile. The point is bare for about 0.2 mile back from the beach, and beyond that is covered with pines. **Point Pinos Light** (36°38.0'N., 121°56.0'W.), 89 feet above the water, is shown from a 43-foot white tower on a dwelling near the N end of the point. A lighted bell buoy is about 0.7 mile off the point.

(150) **Monterey Bay,** between Point Pinos and Point Santa Cruz, is a broad 20-mile-wide open roadstead. The shores are low with sand beaches backed by dunes or low sandy bluffs. **Salinas Valley,** the lowland extending E from about the middle of the bay, is prominent from seaward as it forms the break between the Santa Lucia Range S and the high land of the Santa Cruz Mountains N. The bay is free of dangers, the 10-fathom curve lying at an average distance of 0.7 mile offshore. The submarine **Monterey Canyon** heads near the middle of the bay with a depth of over 50 fathoms about 0.5 mile from the beach near Moss Landing. Shelter from NW winds is afforded at Santa Cruz Harbor and Soquel Cove, off the N shore of the bay, and from SW winds at Monterey Harbor, off the S shore. The tidal currents are reported to be generally weak except at the Deep-draft Mooring Facility about 0.8 mile NW from Moss Landing harbor entrance.

(151) **Weather, Monterey Bay**.–Sea fog is a problem on the bay from about July through September. It is worse over open waters and along the exposed E shore. Around Monterey Harbor in the S and Santa Cruz Harbor in the N, fog reduces visibility to less than 0.5 mile (0.9 km) on 4 to 8 days per month during the worst period. Close to shore, cloudiness begins to increase and descend in the evening by 2100 or 2200. Low clouds or fog cast a pall over the E shore. Around sunrise, conditions begin to improve, and, by 0900, visibilities are usually better than 0.5 mile (0.9 km). The best conditions occur in the early afternoon, when visibilities are less than 3 miles (6 km) and cloud ceiling are less than 1,500 feet (458 m) only 10 to 20 percent of the time. Clear skies and excellent visibility occur 15 to 20 percent of the time. Poor conditions can be expected over the bay and along exposed coasts on 10 to 15 days per month during July, August, and September. Moss Landing is an exposed location, and fog signals operate about 25 percent of the time in August. Radiation fog occurs infrequently from the fall through spring.

(152) Gales are rare over Monterey Bay; extreme gusts have been reported at 40 to 50 knots from October through May. The maximum gust for Monterey Peninsula was a gust of 60 knots from the NE in January 1989. Winds of 17 knots or more occur 1 to 4 percent of the time from November through March; they are rare during July, August, and September. Prevailing winds are W averaging seven knots, except in late fall and early winter, when E winds are as frequent. W through NW winds remain the predominant directions into October, when winds become more variable again.

(153) Winter winds over the bay are variable. Winds from the ESE are as common as winds from the WNW, and, along the shore, calms occur more than 20 percent of the time. In late winter, WNW winds prevail. Strongest winter winds are often out of the S. During spring and summer, they are most likely from the NW.

(154) The average annual temperature at Monterey is 57°F (13.9°C). The average maximum is 65°F (18.3°C) and the average minimum is 48°F (8.9°C). The all-time warmest temperature is 104°F (40°C) recorded in October of 1987. The coolest thermometer reading is 20°F (-6.7°C), recorded in December 1990. The average annual precipitation for Monterey is 18.6 inches (472 mm). Trace amounts of snow have fallen during February in Monterey.

(155) A **restricted and a prohibited area** for an army firing range is in the SE part of the bay, and a naval operating area is in the NE part of the bay. (See **334.1150**, chapter 2, for limits and regulations.)

(156) **Pacific Grove,** a summer resort just SE of Point Pinos, has no commercial wharves, but a small solid-concrete jetty with low-level landing usable only on a seasonal basis, is just S of **Lovers Point**.

(157) **Monterey Harbor**, 3 miles SE of Point Pinos, is a compact resort harbor with some commercial activity and fishing. The harbor can accommodate over 800 vessels.

(158) Depths of more than 20 feet are available in the outer harbor and entrance, and 10 to 6 feet in the small-boat basin. There are many sport-fishing landings, and the small-craft basin provides good shelter for over 500 boats. There are four public launch ramps and a 3-ton public hoist in the municipal marina. The boat yard, located just inside the breakwater has a 70-ton travel lift.

(159) **Monterey,** a colorful and picturesque city on the W side of the harbor, was the capital of California under Mexican rule and for sometime after it became a State. The old adobe custom house is still standing near the waterfront and is now used as a historical museum.

(160) **Prominent features** include the granite **Presidio Monument** on the brow of a hill on the W side of the harbor and a radio tower 0.6 mile N of the monument.

(161) A large red-roofed building is conspicuous on a bluff above the shore at the head of Monterey Harbor, about 4 miles NE of Monterey Harbor Light. Two radio towers just inshore from the sand dunes at **Marina,** 6.5 miles NE from the breakwater, are conspicuous in the S part of Monterey Bay. An aerolight at Monterey Peninsula Airport is 1.9 miles ESE of Monterey Harbor Breakwater Light 6. Another aerolight is 7.3 miles NE of Light 6.

(162) **COLREGS Demarcation Lines.**–The lines established for Monterey Harbor are described in **80.1134**, chapter 2.

MONTEREY HARBOR

(163) Monterey Harbor breakwater is on the N side of the entrance to Monterey Harbor. The breakwater extends seaward from the Coast Guard pier for a combined length of about 1,700 feet. This affords excellent protection in NW weather. However, in heavy weather there may be a strong surge in the harbor. The outer end of the breakwater is marked by a light. A fog signal is at the light. The outer harbor is marked by a private lighted junction buoy. The N channel at the junction buoy leads to a private marina and fuel dock. Loud-barking sea lions occupy the breakwater during the day and should not unnecessarily be disturbed.

(164) **Special anchorages** are S and SE of the breakwater. (See **110.1 and 110.126**, chapter 2, for limits and regulations.)

(165) **Tides**.–The mean range of tide at Monterey is 3.6 feet, and the diurnal range of tide is 5.4 feet. A range of about 8.5 feet may occur on days of maximum tides. The lowest low water is about 2 feet below mean lower low water.

(166) **Currents**.–A very strong current is reported to exist at the small-boat basin entrance when swells run following winter storms. The current runs mainly from the breakwater towards Municipal Wharf No. 1; caution is advised.

(167) **Quarantine, customs, immigration, and agricultural quarantine.**–(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(168) **Quarantine** is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(169) Monterey is a **customs station.**

(170) **Coast Guard.**–Monterey Coast Guard, Station Monterey, is at the foot of the Coast Guard pier.

(171) **Harbor regulations**.–The harbor is owned by the city of Monterey and under the control of a harbormaster. His office is in a building on shore about midway between the two municipal wharves. Transients requesting berth assignments should contact either the harbormaster's office or the privately-owned Monterey Bay Boatworks Company on VHF-FM channel 16. The harbormaster can be contacted by phone at 831-594-7760 or by the Internet website at http://www.monterey.org.

(172) The **speed limit** in the harbor is 3 knots.

(173) **Wharves**.–Municipal Wharf No. 2, the most easterly pier, is 1,600 feet long and 86 feet wide at the outer end; depths alongside the outer E and W sides are 24 feet. Freight and supplies are handled by trucks directly to the pier; a 3-ton hoist is at the pier on the marina side.

(174) Municipal Wharf No. 1, frequently called Fishermans Wharf, is 300 yards W of Wharf 2. It is lined with restaurants and shops.

(175) A marina is just S of the foot of the Coast Guard dock. A 60-ton boat lift is available; complete hull, electrical, and electronic repairs are available.

(176) **Supplies**.–Gasoline and diesel fuel are available at Municipal Wharf No. 2. Water, ice, and marine supplies, are available at the marina S of the Coast Guard dock and Municipal Wharf No. 2.

(177) **Communications**.–Monterey has good air and highway connections with San Francisco and points S.

MOSS LANDING HARBOR

(178) **Moss Landing Harbor,** on the E shore of Monterey Bay 12.5 miles NE of Point Pinos and just N of the small town of **Moss Landing,** is a good harbor of refuge. The harbor is used by pleasure craft and a fishing fleet of about 300 boats. The harbor has 500 berths.

(179) **Prominent features.**–The two huge stacks at a large powerplant near the harbor are the dominating landmarks on Monterey Bay. The stacks are 528 feet high and are marked by flashing red lights. Other stacks at the powerplant and at the nearby mineral processing plant are less conspicuous. A white elevated water tank S of the inner turning basin is prominent.

(180) An area of turbulent water caused by water discharge from the powerplant is marked by a private buoy 250 yards SW from the south jetty light; the turbulence may be dangerous to small craft. An offshore deep-draft vessel mooring and fueling facility is 0.8 mile NW from Moss Landing harbor entrance; large white mooring buoys mark the limits of the facility. A private buoy near the center of the facility marks the fuel pipeline hose cap. Vessels passing the area are advised to stay well clear of all pipelines and other components of this facility, especially when vessels and barges are approaching, moored, or departing; dangerous cables and fuel lines are near the surface of the water. Tug service is available for vessels using the mooring facility.

(181) **COLREGS Demarcation Lines.**–The lines established for Moss Landing Harbor are described in **80.1136**, chapter 2.

(182) **Channels.**–A Federal project for Moss Landing Harbor provides for a 15-foot jettied entrance channel leading NE to an outer turning basin, and thence an inner channel of the same depth leading S to an inner turning basin about 0.8 mile above the entrance. (See Notice to Mariners and latest editions of charts for controlling depths.) The approach to the harbor is marked by a lighted bell buoy. The entrance channel is marked by a buoy, lights and a **052°** lighted range. The jetties are marked by lights on their outer ends, and the inner channel is marked by lights, buoys, and a daybeacon. A fog signal is at the S jetty light. Shoaling usually occurs on the S side of the entrance between the jetties; vessels should favor the N side of the channel when entering.

(183) A channel, marked by private buoys, leads N from the outer turning basin to a private yacht club basin. In June 2000, the reported controlling depth was 10 feet; thence the yacht club basin had depths of 10 to 14 feet. Because of frequent shoaling, local knowledge is advised prior to entering the channel.

(184) **Anchorage.**–The anchorage off Moss Landing Harbor is unprotected, but the holding ground is good for larger vessels in fair weather.

(185) **Weather, Moss Landing**.–The prevailing winds are NW, but there are a few SE winds and N gales during the winter. Mariners in the area should be aware of reported unique environmental conditions. Vessels have experienced sudden wind shifts during the late morning to early afternoon hours. At this time the new wind begins to generate its own waves from the W and NW, dissipating existing swells, and creating a cross pattern of waves giving the sea a "choppy" or confused appearance. During the first few hours following the wind shift, the appearance of the sea surface may not provide a reliable indication of the wind speed. This condition has effected ship handling by setting deep-draft vessels. Occasionally, when there is a southwesterly wind during

an ebb tide, slight breaking seas cross the harbor entrance. (See Weather, West Coast and Hawaii, indexed as such, chapter 3, for further information.)

(186) **Harbor regulations.**–The harbor is administered by the Moss Landing Harbor District and is under the control of a harbormaster. His office is near the inner turning basin. Transients should report to the harbormaster for mooring assignments. Contact the harbormaster on VHF-FM channel 9, 16 or telephone 831-633-2461 for local weather conditions.

(187) **Supplies and Repairs.**–Gasoline, diesel fuel, water, ice, and some marine supplies can be obtained; bilge and sewage pumpout is available; a 70-ton mobile hoist is available for repair work.

(188) **Monterey Wind Gap.**–The great mountain barriers N and S of Monterey Bay and the receding shoreline to the E offer a broad entrance to the cold foggy NW winds of the summer, and they drive over the bay and well into Salinas Valley to the S.

(189) **Soquel Cove** is in the NE part of Monterey Bay, E of Santa Cruz Harbor. Fair shelter is afforded in NW weather, but the cove is open to S weather. The best anchorage is SE of the mouth of **Soquel Creek** in 5 to 6 fathoms, sandy bottom.

(190) At **Seacliff Beach,** 0.5 mile W of **Aptos Creek,** a concrete ship has been beached and filled with sand. The pleasure pier for sport fishing extends from ship to the shore.

(191) A small fishing and pleasure wharf at **Capitola,** on the NW side of Soquel Cove, has 11 feet alongside the landing at the outer end. There are facilities to hoist out small boats. Houses on the bluffs about 1.5 miles E of Capitola are prominent. Three radio towers 0.6 mile NW of **Soquel Point** are conspicuous from the E and S.

(192) **Point Santa Cruz,** 20 miles N of Point Pinos and 2.5 miles W of Soquel Point, consists of cliff heads about 40 feet above the water. The area back of the point is flat, but rises in terraces to higher land. There are two flat rocks close under the point; the outer one is the higher.

(193) **Santa Cruz Light** (36°57.1'N., 122°01.6'W.), 60 feet above the water, is shown from a 39-foot white lantern house on a square brick tower attached to a brick building near the S extremity of the point. A lighted whistle buoy is 1.1 miles SE of the light.

(194) The city of **Santa Cruz** is on the NW shore of the bay. **Seabright, Twin Lakes,** and **Soquel,** suburbs of Santa Cruz, are along the beach to the E.

(195) **Santa Cruz Harbor,** on the NW shore of Monterey Bay between Point Santa Cruz and Soquel Point, has a municipal pier and small-craft harbor.

(196) The Santa Cruz small-craft harbor is just E of Seabright and has slips and end-ties for about 1,200 small craft.

(197) **Prominent features.**–The Casino building and the roller coaster immediately E of the town are prominent.

(198) **COLREGS Demarcation Lines.**–The lines established for Santa Cruz Harbor are described in **80.1138**, chapter 2.

(199) **Channels.**–The entrance to the small-craft harbor is protected by jetties; a light, and fog signal are at the end of the W jetty. The least clearance for the bridges between the north and south basins is 18 feet.

(200) The Santa Cruz harbormaster advises that extensive shoaling occurs at the harbor entrance from November through May. Persons unfamiliar with the area should contact the harbormaster's office prior to entering the harbor; a radio guard on VHF-FM channel 16 is maintained 24 hours a day or telephone 831-475-6161 between 0830 and 1700 daily. The Santa Cruz harbormaster further recommends that mariners without local knowledge should not attempt to enter the harbor during periods of high ground swells.

(201) **Anchorage.**–Good anchorage can be had anywhere off the pier in 5 fathoms, sand bottom. Santa Cruz Harbor provides good shelter in N weather, but in NW weather a heavy swell is likely to sweep into the anchorage. In S weather there is no protection in the harbor; vessels must run for Monterey or Moss Landing Harbor or take refuge in Santa Cruz Municipal small-craft harbor.

(202) **Harbor regulations.**–The harbor is administered by the Santa Cruz Port District Commission. Transient vessels should report to the harbor office at the SE corner of the small-craft harbor, for berth assignments.

(203) A patrol boat operates in the harbor and monitors VHF-FM channel 16. The patrol boat will guide vessels into the harbor on request.

(204) **Wharves.**–The municipal pier, 0.8 mile W of the entrance to the small-craft harbor, is over 0.4 mile long with 26 feet alongside at its outer end; a private seasonal fog signal in on the outer end of the pier. Landings can be made in all but heavy S weather, but few vessels land except fishing boats. Due to the ocean swell sweeping around the point, there is usually considerable surge. The pier is lined with restaurants and stores. A small-boat hoist is on the pier.

(205) **Supplies.**–Gasoline, diesel fuel, and marine supplies are available. A launching ramp and a yacht club are in the harbor.

(206) **Repairs.**–A repair yard at the harbor has a 40-ton mobile lift that can handle vessels for hull and engine repairs. Electronic repairs are also available.

(207) **Communications.**–Santa Cruz has highway and rail connections with San Francisco and the interior.

(208) **Chart 18680.**–From Point Santa Cruz the coast trends W about 4 miles to Needle Rock Point and thence NW to Point Ano Nuevo. The shoreline rises from high bluffs, with a few intervening beaches, to a low flat tree-covered mountain range.

(209) **Needle Rock Point** is 4 miles W of Santa Cruz Light; a slender pillar of rock stands a short distance seaward from the face of the cliffs; another lower pinnacle is about 200 yards E. Neither is distinguishable when abreast it.

(210) **Sand Hill Bluff,** 6.5 miles W of Santa Cruz Light, is composed of sandstone cliffs about 50 feet high with a rounding irregular hillock of white sand near the edge of the cliffs; this hillock is white on the NW side, and is covered with brush and grass on the SE side. Neither this bluff nor Needle Rock Point is a good landmark.

(211) The buildings of a large cement works at **Davenport,** 9 miles NW of Point Santa Cruz, are conspicuous. A steel tower is prominent by day, and many lights are visible at night. The ruins of an old cement loading wharf are at the plant.

(212) In 1975, shoaling to 10 fathoms was reported in 37°00.0'N., 122°30.1'W., about 14.5 miles W of Davenport.

(213) **Loma Prieta,** a prominent flat-topped peak surmounting the high mountainous ridge 13 miles NE of Santa Cruz Light, is the predominating mountain feature of this section. A fire observation tower is on the top of the peak.

(214) **Waddell Creek,** 14.5 miles NW of Point Santa Cruz, is in a narrow steep-sided valley. The high whitish bluffs, immediately N, are quite prominent.

(215) **Point Ano Nuevo,** 18 miles NW of Point Santa Cruz, is formed by sand dunes 20 to 100 feet high. A low black rocky islet is 0.3 mile off the point. Foul ground extends NW and SE from the islet. A group of white houses on the islet is conspicuous. A lighted whistle buoy is about 0.8 mile S of the tower.

(216) Anchorage with protection from N and NW winds can be had in the bight S of the point. The kelp bed and reef, extending a little over 0.5 mile SE from the islet, break the force of the swell.

(217) The 5-mile coast between Point Ano Nuevo and Pigeon Point is low and rocky. **Pigeon Point,** 22.5 miles NW of Point Santa Cruz, is 50 feet high and rises in a gentle slope to the coastal hills. Several moderately large detached rocks extend 350 yards SW. Pigeon Point was named from the wreck at this place of the clipper ship CARRIER PIGEON.

(218) **Pigeon Point Light** (37°10.9'N., 122°23.6'W.), 148 feet above the water, is shown from a 115-foot white conical tower on the end of the point. A radiobeacon is at the station. The light cannot be seen in the bight E of a line joining Pigeon Point and Pillar Point, 20 miles to the N. The light station buildings on Pigeon Point are white with red roofs. A group of farm buildings is about 0.5 mile E. A row of trees, conspicuous against a background of barren hills is about 500 yards NE of the light.

(219) From Pigeon Point for 4 miles to **Pescadero Point,** the coast is nearly straight and is composed of reddish cliffs with numerous outlying submerged and visible rocks. A rocky patch covered 3 feet is about 0.8 mile S of Pescadero Point; a 6¼-fathom rocky patch is about 0.7 mile WSW of the point.

(220) From **Pescadero Creek,** 1.5 miles N of Pescadero Point, the coast for 8 miles N becomes more broken and rugged, with yellow or white vertical cliffs. A prominent whitish cliff over 100 feet high is 7.5 miles N of Pescadero Point. About 9 miles N of the point is a pale yellow building surrounded by numerous antenna poles.

(221) The coast is broken by several small streams in deep steep-sided valleys. N of the high cliff, a low flat tableland extends N for 9 miles and then bends sharply W to Pillar Point, forming Half Moon Bay. The land consists generally of grass-covered rolling hills with ranch houses and cultivated ground in the foreground.

(222) **Chart 18682.–Pillar Point,** 18 miles S of San Francisco entrance, is the S extremity of a 2.5-mile low ridge. Several black rocks extend over 300-yards S of the point; from N these appear as three or four, but from S as only one. **Half Moon Bay** comprises the bight from **Miramontes Point** on the S to Pillar Point on the N.

(223) **Pillar Point Harbor,** in the N part of Half Moon Bay E of Pillar Point, is used by fishing vessels and pleasure craft. The harbor is well protected by breakwaters. The entrance, 200-yards wide, is between the E and W breakwaters. A light marks the end of the E breakwater, and a light and fog signal are on the end of the W breakwater. The entrance has a depth of about 20 feet with depths of 2 to 17 feet inside the harbor. Shoaling has been reported along N side of the breakwaters inside the harbor. The harbor provides good holding ground for anchored and moored vessels. Two breakwaters and a detached breakwater, protect a marina on the N side of the harbor. The detached breakwater is marked by lights on the E and W ends.

(224) **Prominent features.**–Several buildings and a white radar antenna at the U.S. Air Force radar site about 0.2 mile N of Pillar Point are conspicuous when approaching the harbor. The lights of the radar site are conspicuous at night. A rotating aero beacon located 1 mile NW of the marina is visible from the south.

(225) **Caution** is necessary in approaching Pillar Point Harbor because of the foul ground off the entrance. Rocks and reefs, marked by kelp and a lighted bell buoy, extend SE for over 1 mile from Pillar Point. **Southeast Reef,** extending from 1.5 to over 2 miles SE of Pillar Point, is covered 4 to 20 feet and has a pinnacle rock awash at extreme low water at the SE end. Mariners are advised to exercise caution in the vicinity of Pillar Point in dense fog.

(226) **COLREGS Demarcation Lines.**–The lines established for Pillar Point Harbor are described in **80.1140,** chapter 2.

(227) **Routes.**–Vessels from the S approach the harbor E of the lighted gong buoy marking Southeast Reef; vessels from the N use the buoyed opening between the Pillar Point foul ground and Southeast Reef.

(228) **Harbor regulations.**–Pillar Point Harbor is administered by the San Mateo County Harbor District and under the control of a harbormaster. The harbormaster's office is at the head of the L-shaped pier in the marina. The harbormaster can be contacted on VHF-FM channel 16 or telephone 650-726-4382.

(229) There are only private mooring floats in the harbor so transients must anchor. The harbormaster should be consulted before tying alongside piers.

(230) **Wharves.**–An L-shaped pier, 590 feet long with 13 feet alongside the 275-foot outer face, is on the N side of Pillar Point Harbor. Water, ice, and electricity are at the pier, and gasoline and diesel fuel are pumped at the landing. A skiff hoist is on the end of the pier. Marine railways are in the harbor W of the marina and are capable of hauling vessels up to 50 tons.

(231) The 660-foot pier W of the L-shaped pier has about 5 feet at the outer end. A surfaced launching ramp and parking area are near the inshore end of the E breakwater.

(232) **Chart 18680.–Montara Mountain,** 4 miles N of Pillar Point and 2.5 miles inland, is covered with grass and bare trees. From S it shows as a long ridge with several small elevations upon it, but from NW it appears as a flat-topped mountain with four knobs on the summit. It is a prominent feature in approaching the entrance to San Francisco Bay.

(233) **Point Montara,** 2.8 miles N of Pillar Point, is the seaward end of a spur from Montara Mountain and the NW extremity of the ridge forming Pillar Point. It terminates in cliffs about 60 feet high with numerous outlying rocks. Covered rocks and ledges lie 0.8 mile W of the point and extend in a NW direction for about 1.5 miles. This is a dangerous locality in thick weather, and extreme caution should be used when inside the 30-fathom curve.

(234) **Point Montara Light** (37°32.2'N., 122°31.2'W.), 70 feet above the water, is shown from a 30-foot white conical tower on the point. A group of white buildings with red roofs is prominent on the point.

(235) From Point Montara for 2.5 miles to Point San Pedro the coast is bold and rugged, rising sharply from the sea to the spurs extending from Montara Mountain. **Devils Slide** is light-colored and is the highest bluff in this locality. The highway cuts are distinctive features in the bluffs. There are no outlying rocks or dangers other than those off Point Montara.

(236) **Point San Pedro** is a dark, bold, rocky promontory, 640 feet high. It is the seaward termination of Montara Mountain and is an excellent mark in clear weather from either N or S. A large triple-headed rock, about 100 feet high and white on its S face,

projects 0.3 mile W from the point. A rocky area, which breaks in a heavy swell, is reported to exist about 1 mile N of the point.

(237) A 200-yard-long Municipal fishing pier is about 2.5 miles NE of Point San Pedro.